

July 2015

## Stafford County

### Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors

A total of 12 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Stafford County economy.<sup>1</sup> These 12 sectors have a total direct output of approximately \$252 million and support 602.7 jobs in Stafford County. Running the model for all 12 sectors simultaneously produces the following results:

**Agriculture Contribution in Stafford County**

Impact Type <sup>2</sup>	Employment	% of Total Employment	Total Value Added <sup>3</sup>	% of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	% of Gross Regional Product
Direct Effect	602.7	24%	\$64,936,808	46%	\$252,212,464	178%
Indirect Effect	220.0	9%	\$8,563,619	6%	\$19,441,759	14%
Induced Effect	81.5	3%	\$4,990,153	4%	\$9,782,506	7%
Total Effect	904.2	36%	\$78,490,580	55%	\$281,436,729	199%

As shown in the above table, agriculture, food, and food processing supports 904.2 jobs, or 36% of the entire workforce in the county. These industries provide a total economic contribution of approximately \$281 million, roughly 199% of Gross Region Product (GRP). As noted below in the calculation of Gross Regional Product, imports and institutional sales are subtracted. Therefore, counties that import a relatively large amount of goods and services will have a reduced GRP which may lead to agricultural output being greater than GRP.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 12 agriculture, food, and food processing sectors is approximately \$78 million, or 55% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 55% of the total economy.

The following tables document the overall summary numbers of the model, top industries affected by employment and output, and a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting:  
[https://implan.com/index.php?option=com\\_content&view=category&id=19](https://implan.com/index.php?option=com_content&view=category&id=19)

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value Added = Labor Income + Indirect Business Taxes + Other Property Type Income

<sup>4</sup> GRP = Final Demand of Households + Governments Expenditures + Capital + Exports - Imports - Institutional Sales

<sup>5</sup> Output = Intermediate Inputs + Value Added

In the top ten by employment, Grain farming is the top employer in the agriculture industry with 216.2 employees. This table also shows the amount of jobs that are created by the agriculture industry in Stafford County.

#### Top 10 Industries Affected by Employment

Sector Description:	Total Employment	Total Output
Grain farming .....	216.2	\$91,476,616
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming .....	208.1	\$65,154,579
Support activities for agriculture and forestry .....	106.8	\$3,176,684
All other crop farming.....	102.6	\$15,734,149
Wholesale trade.....	25.4	\$4,759,122
Animal production, except cattle and poultry and eggs.....	24.3	\$2,977,303
Monetary authorities and depository credit intermediation .....	20.5	\$3,087,011
Flour milling.....	19.3	\$29,138,314
Securities and commodity contracts intermediation and brokerage .....	13.3	\$632,939
Oilseed farming .....	11.4	\$29,798,213

The Grain farming industry directly contributes approximately \$91 million to Stafford County's economy. This table also shows how much revenue is generated in other industries by having a strong agriculture industry.

#### Top 10 Industries Affected by Output

Sector Description:	Total Employment	Total Output
Grain farming .....	216.2	\$91,476,616
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming .....	208.1	\$65,154,579
Oilseed farming .....	11.4	\$29,798,213
Flour milling.....	19.3	\$29,138,314
All other crop farming.....	102.6	\$15,734,149
Other animal food manufacturing.....	8.5	\$12,405,233
Wholesale trade.....	25.4	\$4,759,122
Farm machinery and equipment manufacturing.....	7.0	\$4,358,199
Support activities for agriculture and forestry .....	106.8	\$3,176,684
Owner-occupied dwellings .....	0.0	\$3,159,686

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture sector and the output they contributed to Stafford County's economy.

[illegible]

All 105 counties in Kansas have IMPLAN models with an agriculture contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Kansas, the retail sector was omitted.